REVIEW OF STATE AND FEDERAL ROYALTIES APPLICABLE TO CRUDE OIL PRODUCTION

Major Producing States of the U.S. and The Province of Alberta

March, 1972

PREPARED FOR

THE MINISTER & Dept. OF MINES AND MINERALS
GOVERNMENT OF THE PROVINCE OF ALBERTA

PREPARED BY

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April 20, 1972

File: 9979

The Honourable Wm. D. Dickie
Minister of Mines and Minerals
Government of the Province of Alberta
Legislative Building
Edmonton, Alberta

Dear Sir:

In co-operation with our U.S. affiliate, James A. Lewis Engineering Inc., of Dallas, Texas, we have prepared a comparative analysis of the current Alberta Crown Royalty charged against crude oil production and its "equivalent" in the six major producing states of California, Louisiana, New Mexico, Oklahoma, Texas and Wyoming.

The "equivalent" to the Alberta Crown Royalty is considered to be the total of Federal or State Royalty plus the various forms of production taxes levied by State, County or Municipal authorities. The State royalty in each of the states in question is fixed at 12.5% of gross sales. However, it should be noted that in the United States, the various types of production taxes levied amount to an equivalent of from 2.0 to in excess of 13% of gross revenue from production.

Royalty on U.S. Federal lands is charged under one of two schedules. Schedule "A" is a fixed 12.5% and applies to all lands leased on a non-competitive basis (open public filings). Schedule "B" applies to lands leased on a competitive bid basis in areas known to be underlain by defined or semi-defined geological prospects. Such lands are comparable to those sold in Alberta at Crown Reserve sales of proven or semi-proven properties. The royalty rate under U.S. Federal Schedule "B" follows a sliding scale related to production rate and ranges from 12.5 to 25.0%.

Severance, ad valorem, conservation and other oil property taxes levied in the U.S. have been computed as a percent of revenue for convenience although ad valorem taxes are usually based on some form of property

value assessment. As such taxes are levied by local authorities, they are subject to geographical and time variations; much like Municipal property taxes in this Province. Listed on the attached table are royalties and estimated average "production" taxes payable by producers in the six major producing states reviewed and the Alberta Crown Royalty schedule in summarized form. We again wish to stress that ad valorem taxes which commonly account for the major portion of the U.S. "production" taxes are not directly charged against oil production, but are based on an "appraised value" of the remaining reserves. A brief description of the various forms of taxation applicable in each state is attached.

In summary, it can be said that whereas the Alberta Crown Royalty follows a production rate related scale from 8 to 16-2/3%, the State Royalty in the major producing States is fixed at 12-1/2%. A degree of production rate related variance is introduced in the U.S. State taxation systems resulting in a total production burden varying from 14.3 to 24.0%. Certain Federal lands are subjected to a royalty rate of 12.5 to 25.0% depending on production rate in addition to local taxes of approximately 7.0%. The total burden against production from these lands ranges from 18.5 to 30.3%.

We trust that this compilation of basic data will assist you in your current review of the Alberta Crown Royalty and thank you for the opportunity to be of service. Should you require additional information, please do not hesitate to call.

Yours very truly,

JAMES A. LEWIS ENGINEERING CO. LTD.

J. E. Michaud, P. Eng.

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SUMMARY OF PRODUCTION TAXES SIX MAJOR U.S. PRODUCING STATES

Production taxes in their various forms in the six major producing States reviewed are levied against all oil properties be they State, Federal or Freehold lands. State and Federal Royalty is payable only on production from lands under which the State or Federal government owns the mineral rights. A large majority of the mineral rights are owned by the State or Federal government in New Mexico and Wyoming. There is a substantial amount of production from Federal lands in California. There is very little Federal acreage in the other three states. The State of Louisiana owns mineral rights under a substantial amount of school land and under inland and offshore lands covered by navigable water. Approximately two sections out of each township, or 5.6% of the land, is owned by the State of Oklahoma. The State of Texas owns a substantial amount of mineral rights under productive school lands. A resume of the various production taxes is presented for each of the studied States in the following paragraphs.

CALIFORNIA

Production taxes include Statewide ad valorem and assessment taxes, local severance taxes and permit fees in thirteen cities, and a subsidence tax in the Wilmington Field. Ad valorem is the principal tax. Representative total production taxes range from two to twelve percent of current gross oil prices.

Summary of Production Taxes
Six Major U.S. Producing States

Ad Valorem Tax

This Statewide tax is based on the current value of each oil and gas property and is calculated as follows:

1. "Fair Market Value" is calculated annually by discounting future net operating income. Net operating income is defined as gross revenue from the sale of all products less royalties, less transportation costs, less operating expenses, and less capital investments in the year incurred. The discount rate applied to the net operating income varies from year to year and from County to County. The current range is 10 to 14%. The discount rate in the major producing counties is expected to be 13.5% in 1972.
2. The "Appraised Value" subject to taxation is determined by multiplying the "Fair Market Value" times the appraisal rate which also varies from year to year by County. Appraisal rates are expected to average 25% in 1972.
3. The tax rate is then applied to the "Appraised Value" to determine the ad valorem tax. Tax rates are expected to be in the range of 9 to 11% of "Appraised Value" in 1972.

Because the operating expenses as a percentage of gross revenue normally increase in the later producing life of a decline oil property, this ad valorem tax as a percent of gross oil price normally declines as oil producing

rate declines. Representative advalorem taxes currently range from 10% of gross revenue for highly profitable, slow decline properties, to 1% of gross revenue for properties near their economic limit producing rate.

Assessment Tax

An assessment tax of $0.0026 per barrel of oil is charged Statewide to support the oil and gas regulatory offices.

Local Severance Taxes and Fees

Thirteen cities which have production charge severance taxes and permit fees are as follows:

City	Severance Tax	Permit Fee
Beverly Hills	3¢/bbl. producing in city; 1-1/2¢/bbl. producing from directional well outside city limits.	$1,000/well/yr.
Corona	1¢/bbl.	Vary with operation.
Culver City	2.5% of gross revenue.	$100/flowing well/yr. $25/pumping well/yr.
Fullerton	2¢/bbl.	$100/well - first yr.
Huntington Beach	2-1/2¢/bbl.	$50/well/yr.
Inglewood	4¢/bbl.	None.
Lawndale	1¢/bbl.	None.
Long Beach	3¢/bbl. over 300 barrels per quarter.	$100/flowing well/yr. $35/pumping well/yr.

(continued...)

City	Severance Tax	Permit Fee
Los Angeles	1-1/4¢/bbl. over 400 barrels per quarter.	$170/well/yr.
Montebello	3¢/bbl.	$40/well/yr.
Seal Beach	1-1/2¢/bbl. over 300 barrels per quarter.	Minor.
Signal Hill	2¢/bbl. over 300 barrels per quarter.	None.
Torrance	5¢/bbl. first 1000 bbls/yr. 4¢/bbl. next 1500 bbls/yr. 3¢/bbl. over 2500 bbls/yr.	$250/well/yr.

Subsidence Tax

Production from the Wilmington subsidence area is taxed at $0.0015 per barrel in addition to above taxes.

LOUISIANA

A severance tax based on API gravity is the principal production tax. Advalorem taxes are charged in some cases on lease equipment but are insignificant. The severance tax schedule is as follows:

Oil Gravity, °API	Tax Rate, ¢/barrel	Oil Price, $/barrel	Tax as Percent of Oil Price, %
Below 22	18	3.35	5.37
22-28	20	3.44	5.81
28-31	21	3.53	5.95
31-32	21-1/2	3.57	6.02
32-36	24-1/2	3.62	6.77
36-43	25	3.73	6.70
Above 43	26	3.75	6.93

NEW MEXICO

The following production taxes are levied on the "taxable value" of products sold:

Type of Tax	Tax Rate, % of "Taxable Value"
Severance	5.05
Ad Valorem	1.71 (1)
Conservation	0.14
TOTAL - Production Taxes	6.90

(1) Advalorem taxes are calculated at local tax rates on 9% of "taxable value". Local rates vary slightly by school district.

"Taxable Value" is defined as the revenue received to the net interest from the sale of products, less transportation costs to the first market place.

OKLAHOMA

Oklahoma levies a Statewide production tax of 7% of the gross value of crude oil, plus an excise tax of $0.0022 per barrel. On typical 37° API gravity sweet crude, this totals $0.2514 per barrel, or 7.06% of gross value.

The first $150 per month of gross revenue from wells making less than three barrels of oil per day is subject to a production tax of only 5%. Other

taxation of oil production or inclusion of the value of oil reserves for ad valorem taxation by local communities is prohibited.

TEXAS

Production taxes include Statewide severance and conservation taxes, and local ad valorem taxes.

Severance Tax

A Statewide severance or occupation tax of 4.6¢ per barrel, or 4.6% of market value, whichever is greater, is levied on all oil produced.

Conservation Tax

Statewide conservation tax is $0.001875 per barrel.

Ad Valorem Tax

Local communities including counties, cities, school districts and water districts are allowed to apply ad valorem taxation to the value of oil reserves and production equipment. There is no prescribed procedure for valuing oil property and valuation procedures currently in use vary widely. Generally, the valuation procedures are similar to the procedure used in California.

When compared to current oil prices, the resulting ad valorem taxes range from 1 to 11% of gross oil price. The range in ad valorem taxes on sim-

ilar properties may be as great as six percentage points of gross oil price. Representative ad valorem tax rates based on averages of actual taxes paid on numerous leases in recent years are:

Area	Ad Valorem Tax as % of Gross Oil Price
Panhandle, North Central and West Texas	3.0
South and East Texas	8.5

WYOMING

Production taxes include Statewide ad valorem, severance and conservation taxes. Total effective tax rate is approximately 7% of gross oil price.

Ad Valorem Tax

An ad valorem tax is levied on the preceding year's gross revenue, and on the value of surface equipment. The current effective rate is approximately 6.5% of gross revenue.

Severance Tax

Severance tax rate is 1% of gross revenue less 52.5 mills of the ad valorem tax, or a net effective rate of approximately 0.5% of gross revenue.

Conservation Tax

A tax of 0.03% of gross revenue is levied to finance operation of the Oil and Gas Conservation Commission.

SUMMARY OF TYPICAL GOVERNMENT ROYALTY AND PRODUCTION TAXES

Major Producing Areas
In
The United States of America and the Province of Alberta, Canada

March, 1972

State, Area or Condition	State or Federal (1) Royalty, Percent of Gross Revenue	Total Production Taxes, Percent of Revenue After Royalty (2)	Total Effective Royalty Plus Taxes, (3) Percent of Gross Revenue
CALIFORNIA			
Flush production within a taxing city limit	12.5	12.0	23.0
Stripper production outside of city limits	12.5	2.0	14.3
LOUISIANA			
Below 32°API	12.5	5.9	17.7
Above 32°API	12.5	6.8	18.5
NEW MEXICO			
State land and Federal Schedule "A" Royalty	12.5	6.9	18.5
Federal Schedule "B" Royalty:			
50 barrels/day or less	12.5	6.9	18.5
100 barrels/day	17.0	6.9	22.7
250 barrels/day	21.0	6.9	26.5
400 barrels/day or more	25.0	6.9	30.2
OKLAHOMA			
Flush Production	12.5	7.1	18.7
Stripper production yielding less than $150/month gross revenue	12.5	5.1	17.0
TEXAS			
Panhandle, North Central and West Texas	12.5	7.65	19.2
South and East Texas	12.5	13.15	24.0
WYOMING			
State land and Federal Schedule "A" Royalty	12.5	7.0	18.6
Federal Schedule "B" Royalty:			
50 barrels/day or less	12.5	7.0	18.6
100 barrels/day	17.0	7.0	22.8
250 barrels/day	21.0	7.0	26.6
400 barrels/day or more	25.0	7.0	30.3
ALBERTA			
Crown Royalty:			
25 barrels/day or less	8.0	-	8.0
30 barrels/day	10.0	-	10.0
40 barrels/day	12.5	-	12.5
50 barrels/day	14.0	-	14.0
60 barrels/day	15.0	-	15.0
75 barrels/day	16.0	-	16.0
90 barrels/day or more	16-2/3	-	16-2/3

NOTES: (1) Federal royalty at 12-1/2% under Schedule "A" used except as noted.

(2) Production taxes include severance, ad valorem, conservation and all other taxes levied directly on oil production or oil property. Taxes are expressed as a percent of revenue even though ad valorem taxes are usually based on some other method of property value.

(3) Total take from royalty and production taxes for production on State or Federal land.